

**Durham Center Water System**  
**Public Water System I.D. #CT0380021**  
**2006 Annual Consumer Report on the Quality of Tap Water**  
Prepared by New England Water Utility Services

**Dear Customer:**

We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual water quality report to customers in addition to other notices that may be required by law. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. Durham Public Water System is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water.

**We are proud to report that Durham Center Water System had no Violations in 2006**

We encourage public interest and participation in our community's decisions affecting drinking water. Any water system related comments or suggestions can be directed to Mr. Braig at 860-669-8630 ext. 3058. More information is available on the World Wide Web at <http://www.waterdata.com>.

**Water Source**

Durham Center Water System is supplied by groundwater pumped from two wells located within the town of Durham. Well #1 is an 8 inch diameter well and well #2 is a 6 inch diameter well. Both are drilled bedrock type wells. The Town of Durham has received a grant to provide necessary water system repairs. The installation of new water system infrastructure is currently under-way and should be completed in the summer of 2007.

**Protecting Water Source**

Many people don't know that most contaminants enter rivers, lakes, and reservoirs from storm water runoff of streets, golf courses, athletic fields, construction sites, farms, and neighborhoods like yours. You can help reduce polluted runoff using the following guidelines:

- Restrict the use of lawn chemicals, especially before heavy rains.
- Dispose of pet waste properly so that it does not wash into a nearby stream or storm drain.
- Have septic tanks inspected every two years, and cleaned as needed. Make septic system repairs as soon as possible.
- Do not pour used motor oil on the ground or into storm drains. Contact your town for proper disposal of household chemicals.
- Report muddy runoff from construction sites to your town's zoning or wetland officials.

The State of Connecticut Department of Public Health (DPH) has completed an assessment of our drinking water sources and has assigned our water sources with an overall susceptibility rating of "High". This rating indicates that our water sources have a high risk of contamination primarily as a result of the lack of appropriate sanitary radius around production wells. The completed assessment report is available on the Drinking Water Division's website ([www.dph.state.ct.us/BRS/Water/SWAP/swap.htm](http://www.dph.state.ct.us/BRS/Water/SWAP/swap.htm)). More information on the source water assessment program can also be found on the Environmental Protection Agency's website: [epa.gov/safewater/protect/swap.html](http://epa.gov/safewater/protect/swap.html).

**Water Conservation**

Conserving water helps to ensure that we have an adequate supply of water for public health and safety, especially during peak demands seasons. Conserving can also lower your water bill, and depending on the community where you live it may also reduce the impact on your subsurface sewage disposal system. Here are some things you can do to conserve:

- Repair leaking toilets - check for toilet leaks by putting a drop of food coloring in the tank. If the food coloring seeps into the bowl without flushing, there is a leak.
- Consider installing a 1.6 gallon per flush toilet.
- Don't flush tissues or spiders down the toilet, use a waste basket instead
- Fix leaking fixtures
- Run full loads in the dishwasher
- Set the water level in the washing machines to match the amount of clothes being washed
- Water lawns and gardens in the early morning
- Use mulch around plants and shrubs
- Use a bucket rather than a running hose to wash cars

## An Explanation of the Water-Quality Data Table

The table shows the results of our water-quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement. Definitions of MCL and MCLG are important. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. The data presented in this report is from the most recent testing done in accordance with regulations. All 2006 water quality analyses were conducted by the following state certified laboratories: Environmental Consulting Labs, Inc. (PH-0535).

**Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal or MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must follow.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination

### Key To Table

AL = Action Level

MCLG = Maximum Contaminant Level Goal

N/A = Not Applicable

NTU = Nephelometric Turbidity Units

ppm = parts per million, or milligrams per liter (mg/l)

MCL = Maximum Contaminant Level

MFL = million fibers per liter

NL = Notification Level

pci/l = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter (µg/l)

## Regulated Contaminants

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation
<b>Disinfectant</b>								
Chlorine Residual	2006	ppm	MRDL 4.0	MRDLG 4.0	2.5	0.3 – 2.5	Chlorination used for disinfection of water	NO
<b>Inorganic</b>								
Barium	2004	ppm	2	2	0.3	0.1 – 0.3	Erosion of natural deposits	NO
Chloride	2004	ppm	250	250	89	N/A	Erosion of natural deposits, road salt	NO
1 Copper	2006	ppm	AL=1.3	1.3	* 0.12	0.05 – 0.13	Corrosion of household plumbing systems	NO
Fluoride	2004	ppm	4	4	0.4	0.1 – 0.4	Erosion of natural deposits	NO
2 Lead	2006	ppb	AL=15	0	* 2	< 1 – 6	Corrosion of household plumbing systems	NO
Nitrate	2006	ppm	10	10	2.25	0.40 – 2.25	Runoff from fertilizer use; Erosion of natural deposits	NO
<b>Microbiological s</b>								
3 Turbidity	2006	NTU	5	N/A	2.3	< 0.05 – 2.3	Erosion of natural deposits	NO
<b>Radioactive</b>								
Alpha emitters	2006	pCi/L	15	0	3.53	0.78 – 3.53	Erosion of natural deposits	NO
Combined Radium	2006	pCi/L	5	0	2.62	ND – 2.62	Erosion of natural deposits	NO
Uranium	2006	pCi/L	30	0	0.84	0.48 – 0.84	Erosion of natural deposits	NO

\* 90<sup>th</sup> percentile value

### Water-Quality Table Footnotes

- Compliance with the Lead and Copper rule is based on the value of the 90th percentile sample. The value for the copper 90<sup>th</sup> percentile sample was 0.12 ppm and is listed as the "Detected Level". The action level for copper is 1.3 ppm. None of the 11 samples collected exceeded the action level.
- Compliance with the Lead and Copper rule is based on the value of the 90th percentile sample. The value for the lead 90<sup>th</sup> percentile sample was 2 ppb and is listed as the "Detected Level". The action level for lead is 15 ppb. None of the 11 samples collected exceeded the action level.
- Turbidity: Is a measure of the cloudiness of the water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth.

## Unregulated Contaminants

Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation
<b>Inorganic Contaminants</b>								
Sodium	2004	ppm	NL = 28	N/A	57	39 - 57	Erosion of natural deposits	NO
Sulfate	2004	ppm	N/A	N/A	29	25 - 29	Erosion of natural deposits	NO

## Special Educational Statements

### Copper Health Effects:

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. Flushing the tap for several minutes before use greatly reduces the concentration of copper in the water.

### Lead Health Effects:

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Flushing the tap for several minutes before use greatly reduces the concentration of lead in the water.

### Sodium Health Effects:

The reason for this notification is so that consumers on low or restricted sodium diets may take into account their sodium intake from the drinking water. *If you have been placed on a sodium-restricted diet, please inform your physician that your water contained approximately 60 mg/l of sodium as a result of testing done in 2004.*

## Required Additional Health Information

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

## National Primary Drinking Water Regulation Compliance

In addition to the contaminants previously listed, Durham Center Water System also had the water tested for pH, color, odor and the presence of total coliform bacteria. Results from all of the other analysis for pH, color and odor are within the ranges specified by the state health department for these parameters. Also, there were no total coliform bacteria detected in any of the distribution system water samples tested in 2006.

This report was prepared by New England Water Utility Services (NEWUS) of Clinton, Connecticut. In addition to this report, NEWUS also provides Durham Center Water System with contract operation of the water system. The contract operation includes the services of a state certified operator who monitors the water system for compliance with all state and federal drinking water regulations. The operating contract also includes services such as making emergency repairs when needed, making recommendations for improving water quality and increasing system reliability. For more information, call Mr. Braig of New England Water Utility Services at 860.669.8630 ext. 3058.